

Title (en)
PIEZOELECTRIC ACTUATOR

Title (de)
PIEZOELEKTRISCHER AKTOR

Title (fr)
ACTIONNEUR PIEZOELECTRIQUE

Publication
EP 1709696 A1 20061011 (DE)

Application
EP 04821078 A 20041118

Priority
• EP 2004053004 W 20041118
• DE 102004002133 A 20040115

Abstract (en)
[origin: WO2005069394A1] Known piezoelectric actuators comprise ceramic layers and electrode layers, a respective outer cover layer being located on the ends of the piezoelectric actuators and said ceramic layers and outer cover layers having a respective predefined dielectric constant. The rapid switching of the actuator causes significant electromagnetic interference, which must be reduced by complex measures that are performed in the control unit or electric lines. To reduce the electromagnetic interference in the inventive device, the interference capacity between the actuator and the actuator housing that is electrically grounded is reduced. According to the invention, the outer cover layers (16, 17) have a lower relative dielectric constant than the ceramic layers (2) between the outer cover layers (16, 17).

IPC 8 full level
H01L 41/083 (2006.01); **H01L 41/053** (2006.01)

CPC (source: EP US)
H10N 30/50 (2023.02 - EP US); **H10N 30/88** (2023.02 - EP US)

Citation (search report)
See references of WO 2005069394A1

Designated contracting state (EPC)
DE FR GB IT

DOCDB simple family (publication)
DE 102004002133 A1 20050804; DE 502004009940 D1 20091001; EP 1709696 A1 20061011; EP 1709696 B1 20090819; US 2007152542 A1 20070705; US 7429813 B2 20080930; WO 2005069394 A1 20050728

DOCDB simple family (application)
DE 102004002133 A 20040115; DE 502004009940 T 20041118; EP 04821078 A 20041118; EP 2004053004 W 20041118; US 58603304 A 20041118